CHC irressecável
Optimização da terapêutica sistémica
A perspectiva da Radiologia

Élia Coimbra

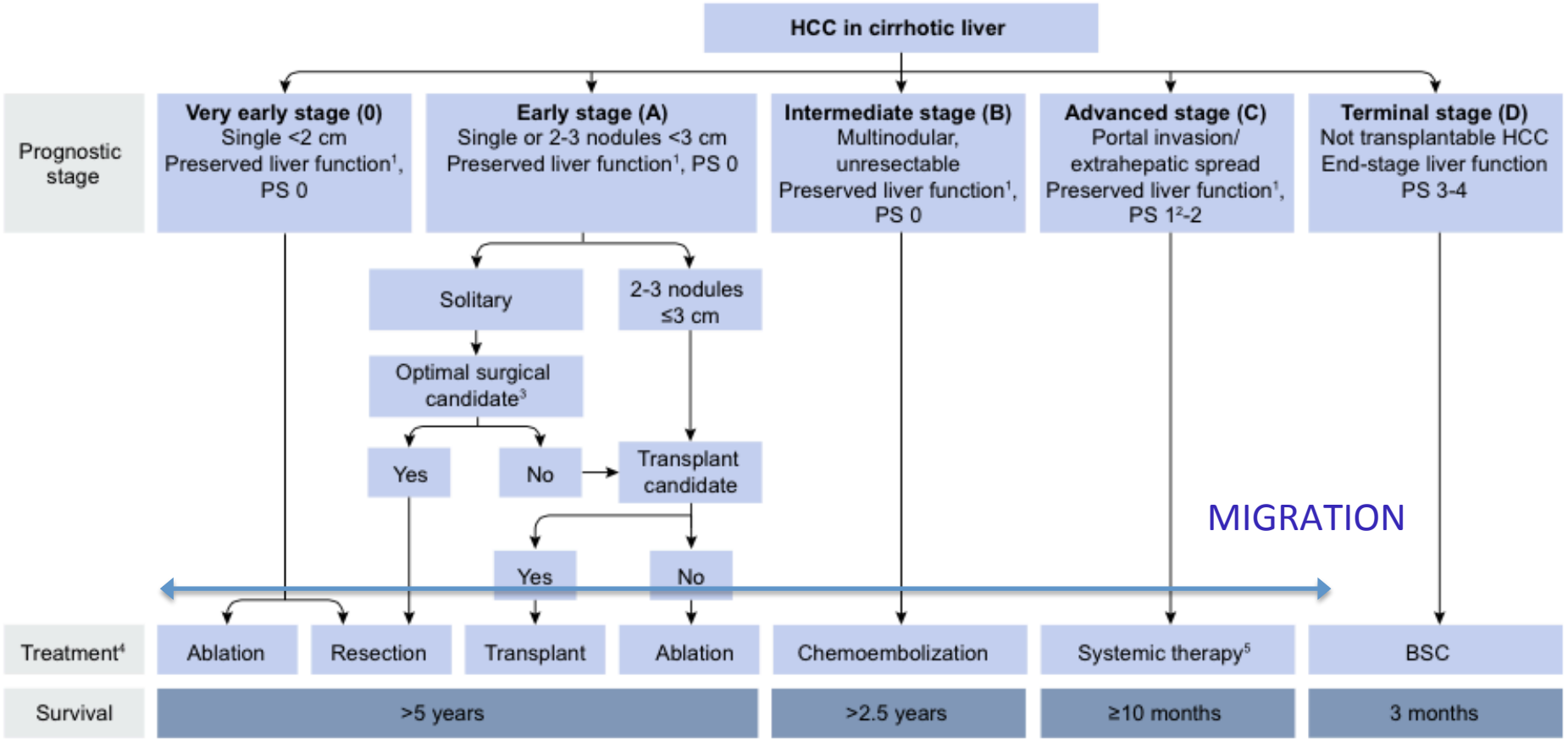
Unidade de Radiologia de Intervenção

URI
Unidade de Radiologia de Intervenção

CENTRO HOSPITALAR
UNIVERSITÁRIO DE LISBO
CENTRAL

C H-B-P T
Centro Hepato-Bilio-Pancreático e de Transplantação

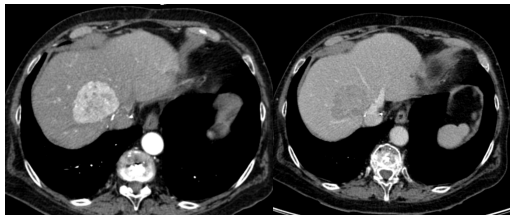
HCC Management
BCLC staging system



CHC Tratado FOLLOW –UP

- Decisão cirúrgica
- Resseção ou transplante

✓ Recidiva do CHC



- Decisão TLR
- (Ablação ou quimio ou radioembolização)

✓ Controlo local tratamento / Recorrencia/ Progressão

- Decisão terapêutica sistémica
- Sorafenib

✓ Evolução / Progressão da doença

TC – TRIFÁSICO OU RM DINÂMICA

CRITÉRIOS DE AVALIAÇÂO / Relatório exame em função da informação

Radiologic Response Systems – Critérios tratamentos por TLR

Response Outcome	WHO	RECIST	EASL	mRECIST
CR	No measurable disease	No measurable disease	Disappearance of intratumoral arterial enhancement in all arterially enhancing tumors	Disappearance of intratumoral arterial enhancement in all target tumors
PR	≥ 50% decrease in sum of cross-products	≥ 30% decrease in sum of longest diameters	≥ 50% decrease in sum of cross-products of viable tumor tissue	≥ 30% decrease in sum of longest diameters of arterially enhancing viable tissue in target tumors
PD	≥ 25% increase in cross-product of any tumor or appearance of new tumor	≥ 20% increase in sum of longest diameter measured on any previous study (must be ≥ 5 mm increase)	≥ 25% increase in cross-product of any viable tumor tissue or appearance of new tumor	≥ 20% increase in sum of longest diameter of viable target tumor measured on any previous study (must be > 5 mm increase)
SD	Neither PR nor PD	Neither PR nor PD	Neither PR nor PD	Neither PR nor PD

Resposta Completa - Resposta Parcial - Progressão - Doença Estável

Resposta Completa

Sexo masculino, 60 anos

DHC alcool ; Diabetes (insulina)

CHC 18mm segmento IV a

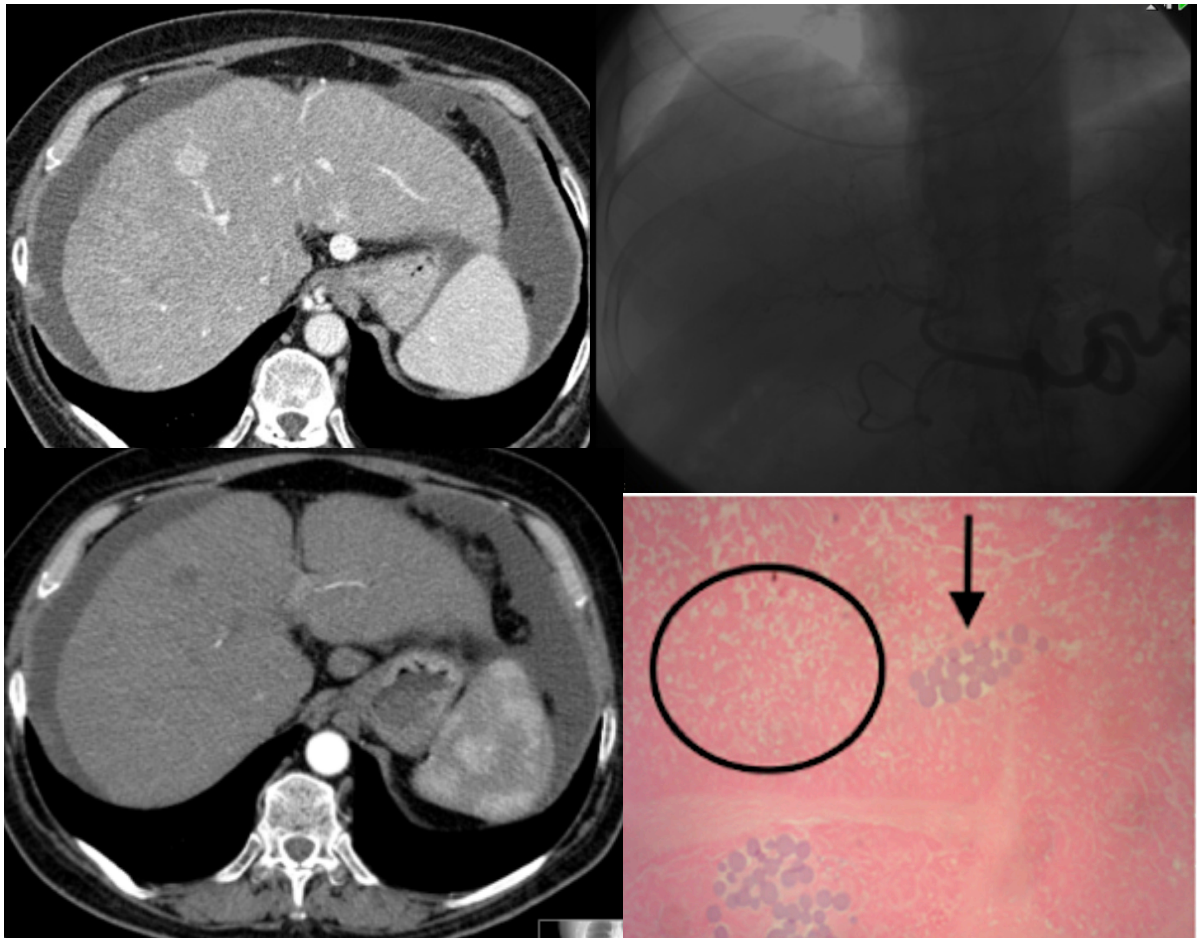
CHILD B (7 pontos)

REFERENCIADO CHBPT

RMD

TACE

TX 6 meses dp- necrose



Resposta Parcial

54 anos, sexo masculino

DHC virus (G4,F2)

Toxicodependência dos 20-34 anos;

Tratmento com Sofosbuvir +Grazoprevir/Elbasvir + Ribavirina (2017).

Maio 2018 carga Viral indetectável.

Eco com nódulo segmento V.

TC – CHC com 3,6 cm.

CHILD A; ECOG 0;

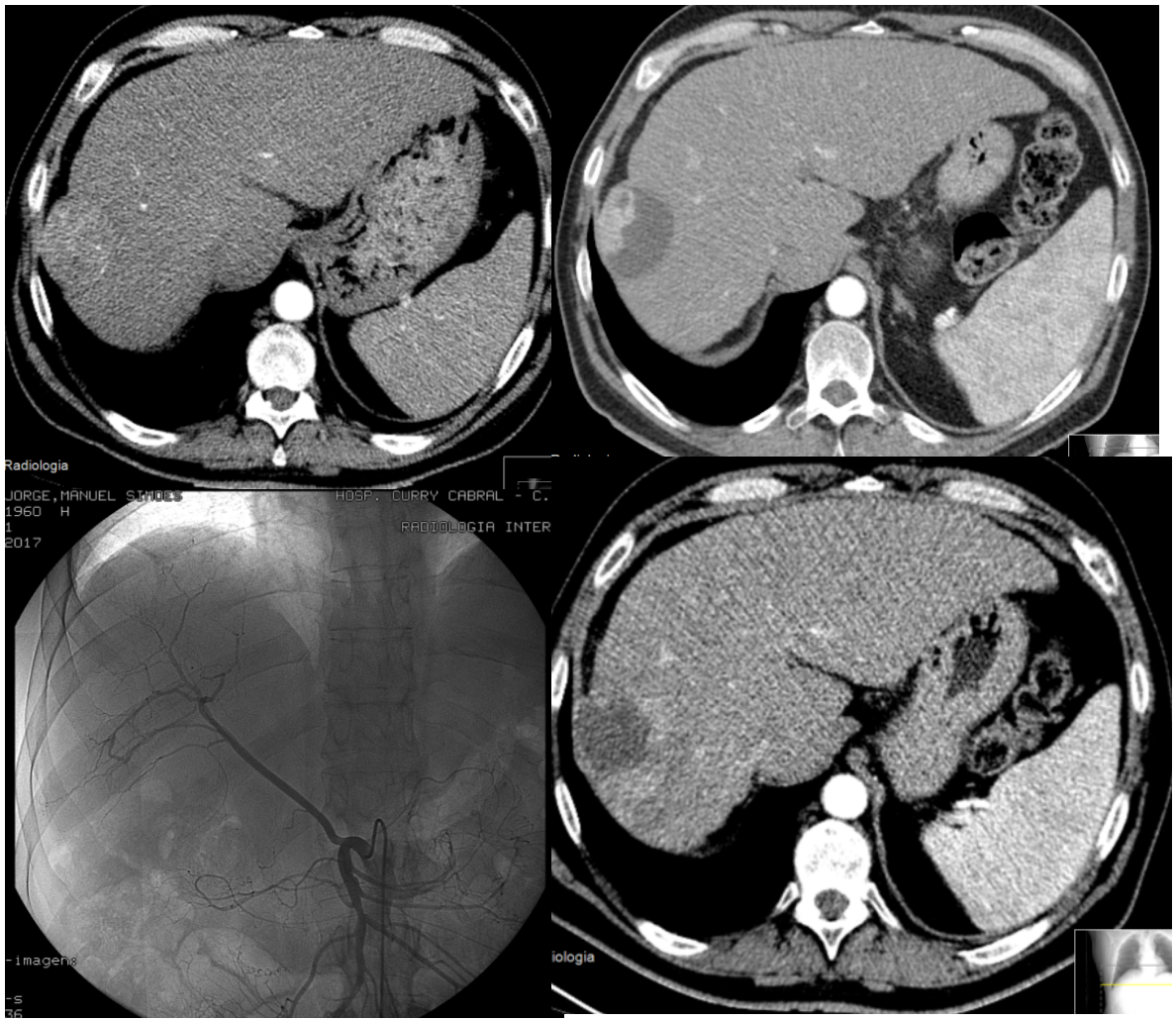
Alfafetoproteína 2.06 ng/mL

REFERENCIADO AO CHBP-T Junho 2018

RMD

TACE – Agosto e Novembro

– consulta pré TX



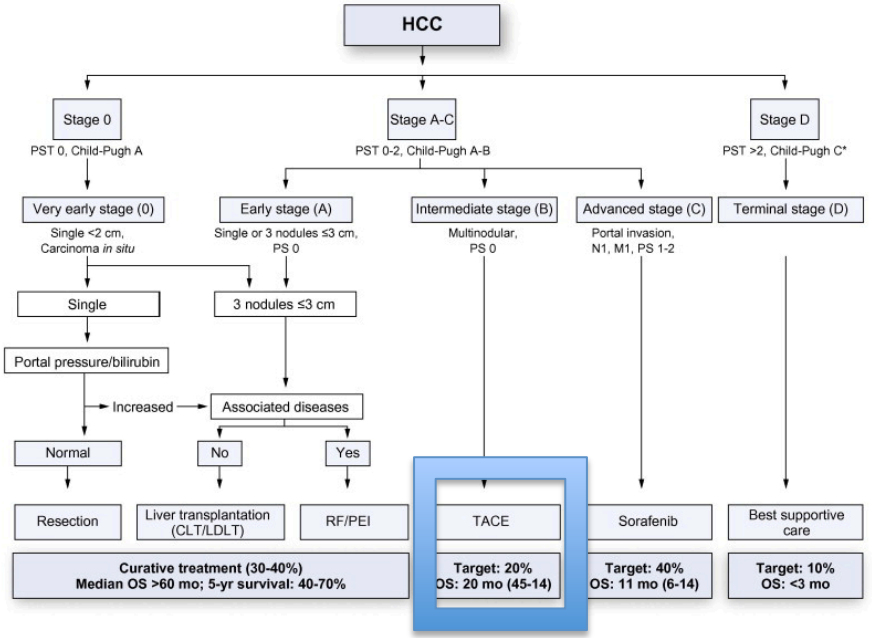
Doença Estável - SD

- Sexo masculino 66 anos
- DHC Virus C e alcool
- Anti HCV positivo; RNA negativo
- Seguido hepatologia desde 2009
- Ecografias regulares sem alterações
- Maio 2017 subida alfafetoproteina (2 vezes o normal)
- RM Nódulo suspeito (hipocaptante)
- 5 cm/ segmento IV, exofitico
- CHILD A ECOG 0
- Referenciado ao CHBP-T

  Agosto 2017

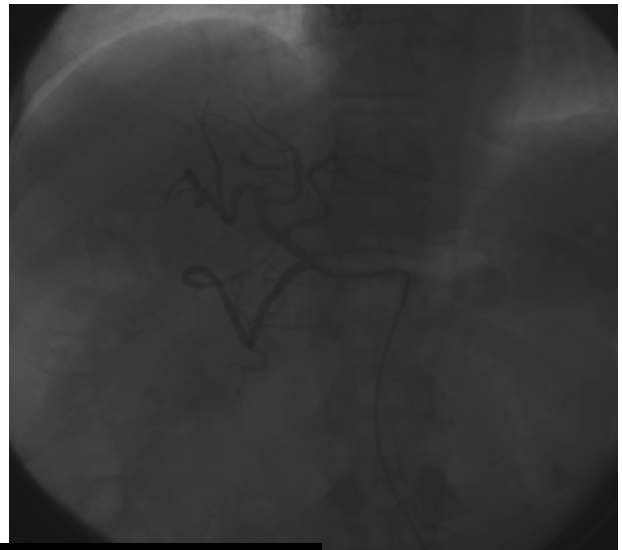
  RMD

  ARTERIOGRAFIA /TACE

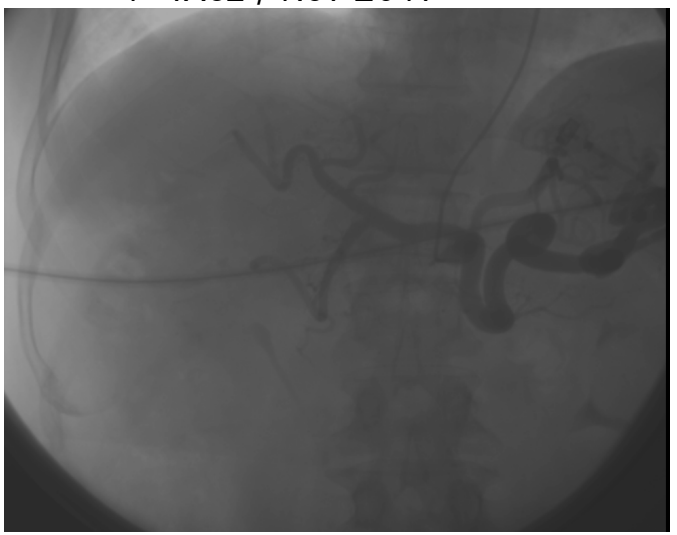


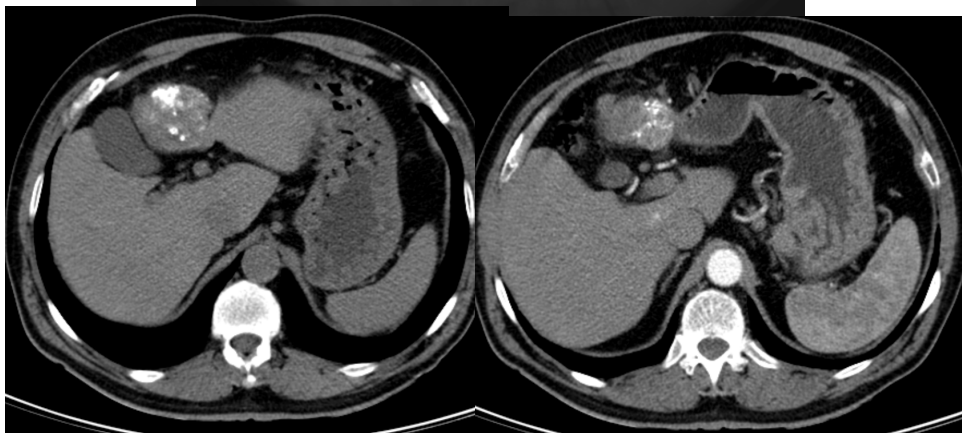
Doença estável

Arteriografia e lipiodol Set 2017



1 ªTACE / Nov 2017



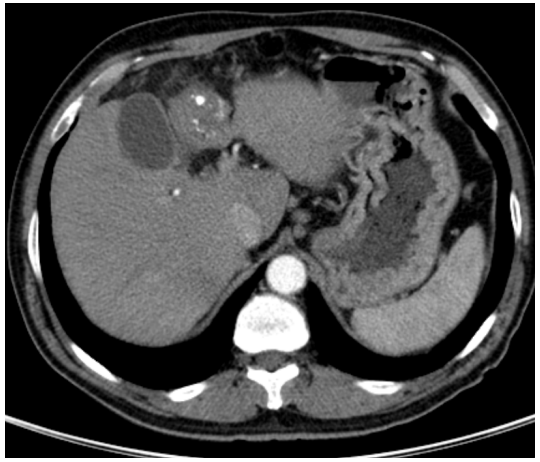


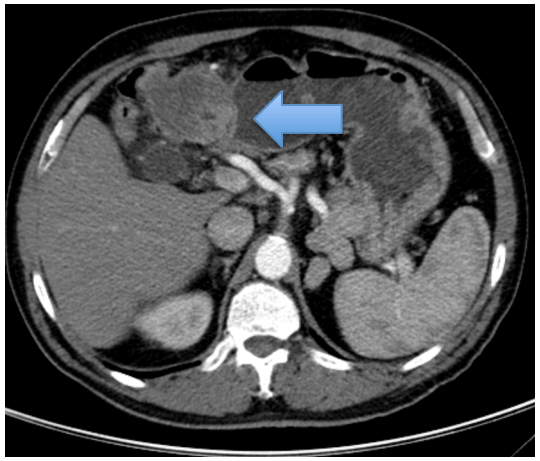
TC 1 M / Out 2017

TC 1 M / Dez 2017

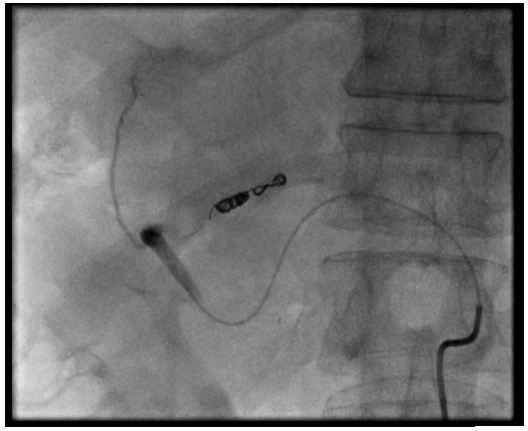
Doença estável

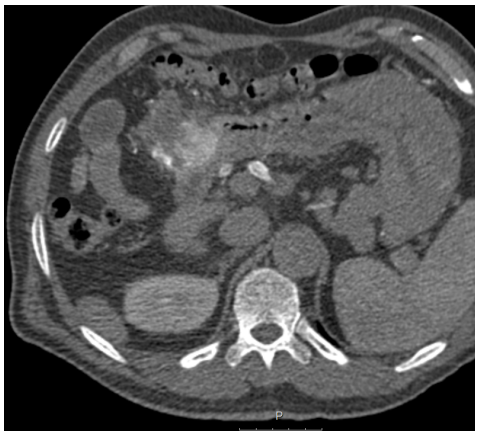
TC Out 2018



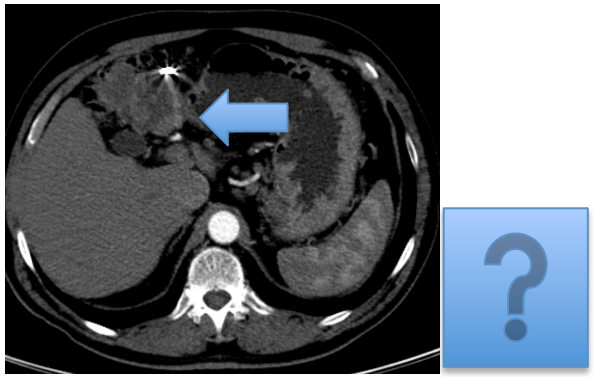


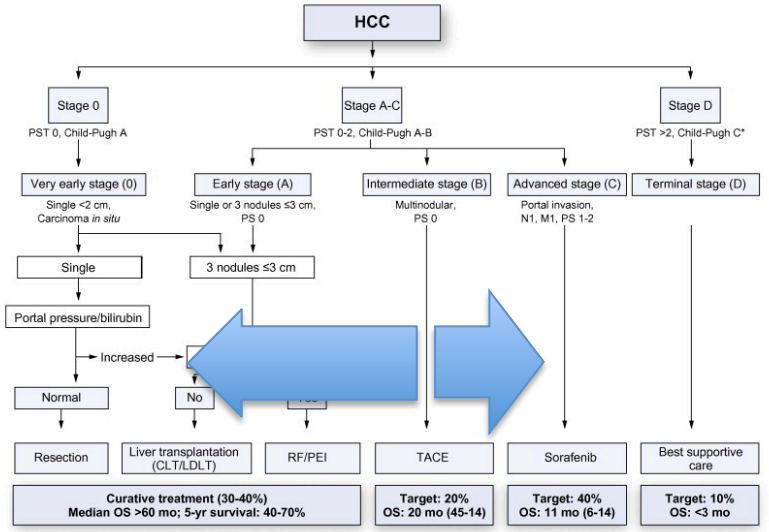
2 ªTACE / Dez 2018





TC Fev 2019





Alfafetop 16.9 ng/mL

Progressão

Sexo feminino 67 anos

DHC virus C (genotipo 1b)

Sofosbuvir

Fibroscan F3-F4

Ecografia detecta nódulo

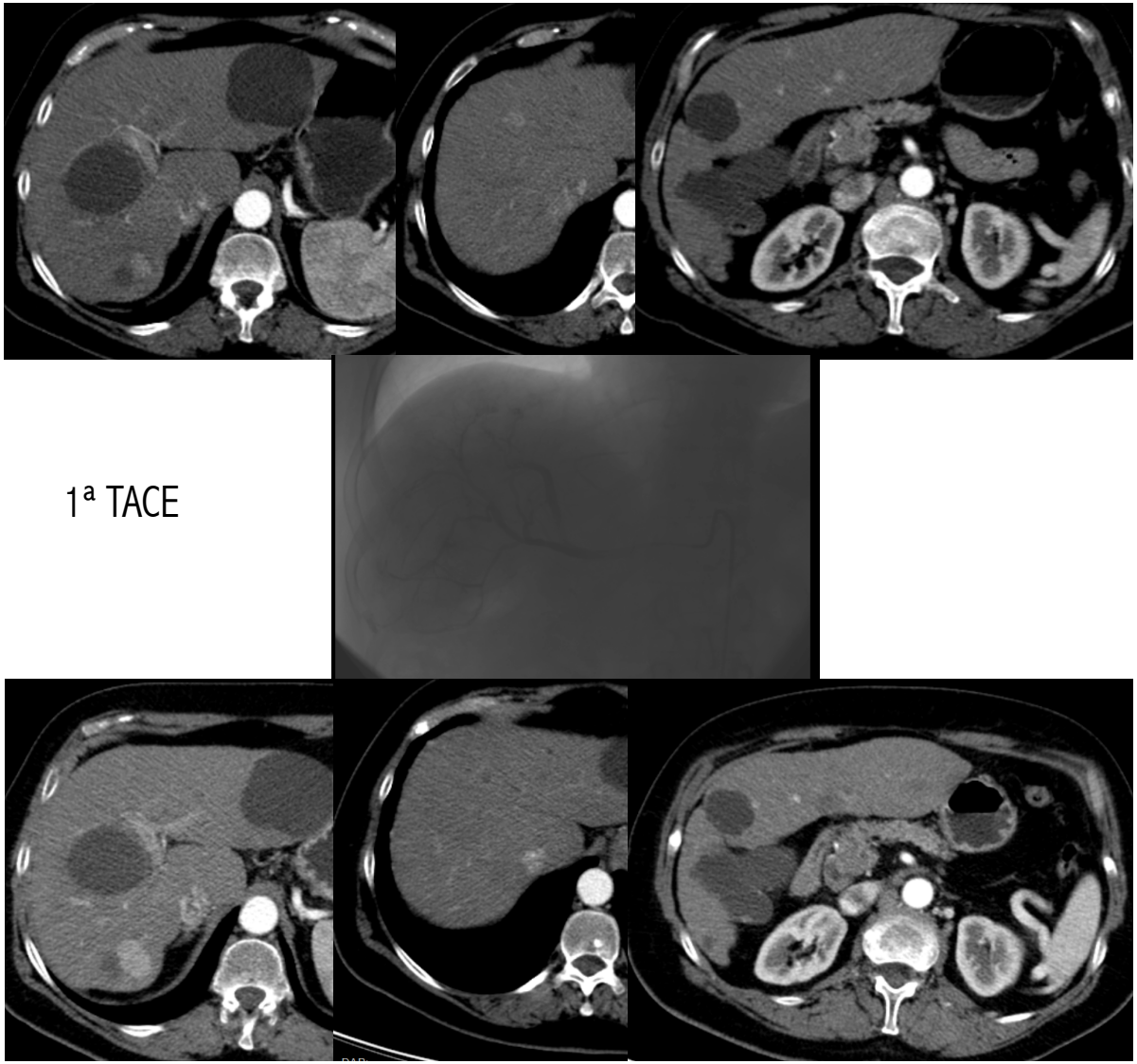
TC 3 nódulos CHC

Quistos hepáticos

RMD

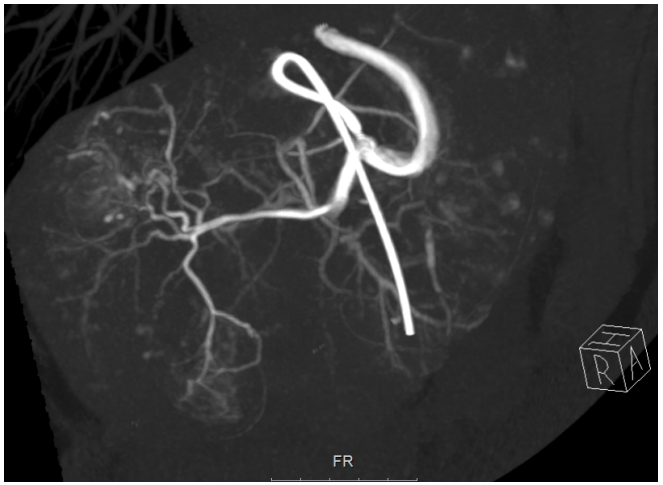
TACE

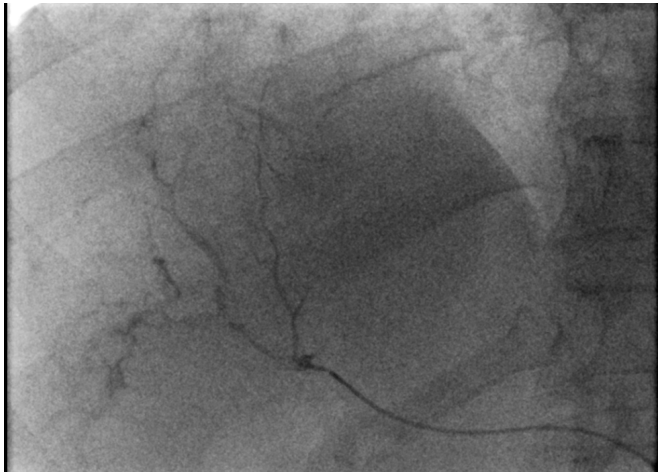
Consulta pré transplante

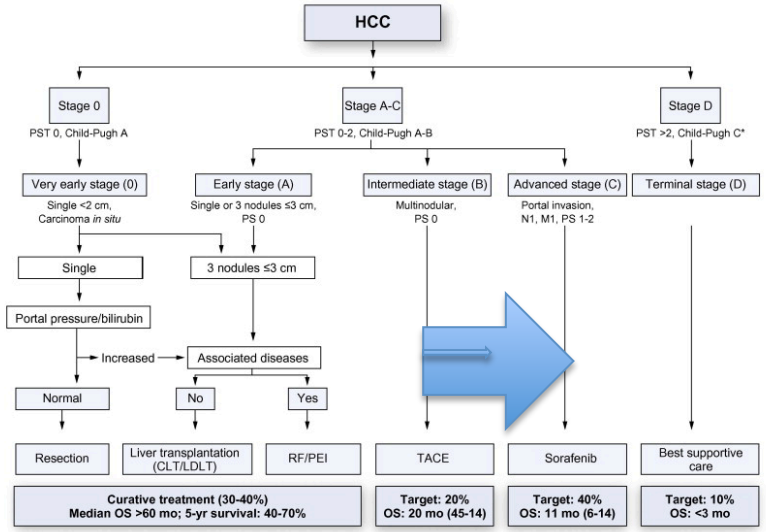


Progressão

2ª TACE







Updated use of TACE for hepatocellular carcinoma treatment: How and when to use it based on clinical evidence

Jean-Luc Raoul[a,*], Alejandro Forner[b,c], Luigi Bolondi[d], Tan To Cheung[e], Roman Kloeckner[f], Thierry de Baere[g]

Cancer Treatment Reviews 72 (2019) 28–36

Parameters used to calculate STATE, HAP, ART, and ABCR scores.

	To decide for 1st TACE		To decide for reTACE	
	STATE [54]	HAP [55]	ART [56]	ABCR [57]
	Baseline (before 1st TACE)			
Albumin	In g/L as score points	< 36 g/dL (1 point)		
Bilirubin		> 37 μmol/L (1 point)		
Tumor load	Beyond up-to-seven criteria (−12 points)	Max tumor diameter > 7 cm (1 point)		
CRP	≥1 mg/dL (−12 points)			
BCLC stage				A (0 point) B (2 points) C (3 points)
AFP		> 400 ng/mL (1 point)		≥200 ng/mL (1 point)
			After 1st TACE	
Child-Pugh score			1-point increase (1.5 point) ≥2-point increase (3 points)	≥2-point increase (2 points)
Radiologic tumor response			No (1 point)	Yes (-3 points)
AST			> 25% increase (4 points)	
Score range	*Depends on serum albumin level (range greater than ART)*	*From 0 to 4*	*From 0 to 8*	*From −3 to +6*

Thus far, these scores have shown limited predictive value and cannot be used to make clear-cut clinical decisions. To date, tumor burden, BCLC stage at baseline, Child-Pugh score, and radiologic response are considered the most predictive factors. In practice, TACE should not be repeated when substantial necrosis is not achieved after two TACE treatments or when there is progression

EASL Clinical Practice Guidelines: Management of hepatocellular carcinoma☆

JOURNAL
OF HEPATOLOGY

Response assessment

Recommendations

- Assessment of response in HCC should be based on mRECIST for loco-regional therapies (**evidence moderate; recommendation strong**). For systemic therapies both mRECIST and RECIST1.1 are recommended (**evidence moderate; recommendation weak**). The use of changes in serum biomarker levels for assessment of response (*i.e.* AFP levels) is under investigation.

EASL Clinical Practice Guidelines: Management of hepatocellular carcinoma☆

JOURNAL OF HEPATOLOGY

Sorafenib is the standard first-line systemic therapy for HCC. It is indicated for patients with well-preserved liver function (Child-Pugh A) and with advanced tumours (BCLC–C) or earlier stage tumours progressing upon or unsuitable for loco-regional therapies (**evidence high; recommendation strong**).

Regorafenib is recommended as second-line treatment for patients tolerating and progressing on sorafenib and with well-preserved liver function (Child-Pugh A class) and good performance status (**evidence high; recommendation strong**). Recently, Cabozantinib has

CRITÉRIOS de AVALIAÇÃO RADIOLÓGICA

PROGRESSÃO

CT imaging findings in patients with advanced hepatocellular carcinoma treated with sorafenib: Alternative response criteria (Choi, European Association for the Study of the Liver, and modified Response Evaluation Criteria in Solid Tumor (mRECIST)) versus RECIST 1.1

M. Gavanier[a,*], A. Ayav[b,c], C. Sellal[a,c], X. Orry[a,c], M. Claudon[a,c,d], J.P. Bronowicki[c,e], V. Laurent[a,c,d]

European Journal of Radiology 85 (2016) 103–112

The main objective was to determine which criteria (RECIST 1.1, mRECIST, Choi or EASL) correlates best with OS among patients with HCC treated with sorafenib. The secondary objectives were to describe morphological changes in tumors treated with sorafenib and their correlation with pretreatment characteristics to identify predictors of non-response.

Bargellini found that RECIST 1.1, mRECIST and EASL were reproducible but not predictive of OS. We observed a significantly increased response rate with the Choi criteria compared with the other three sets of criteria, and OS was significantly longer for responders compared with progressors (20.4 versus 9 months, HR 0.42, p = 0.035)

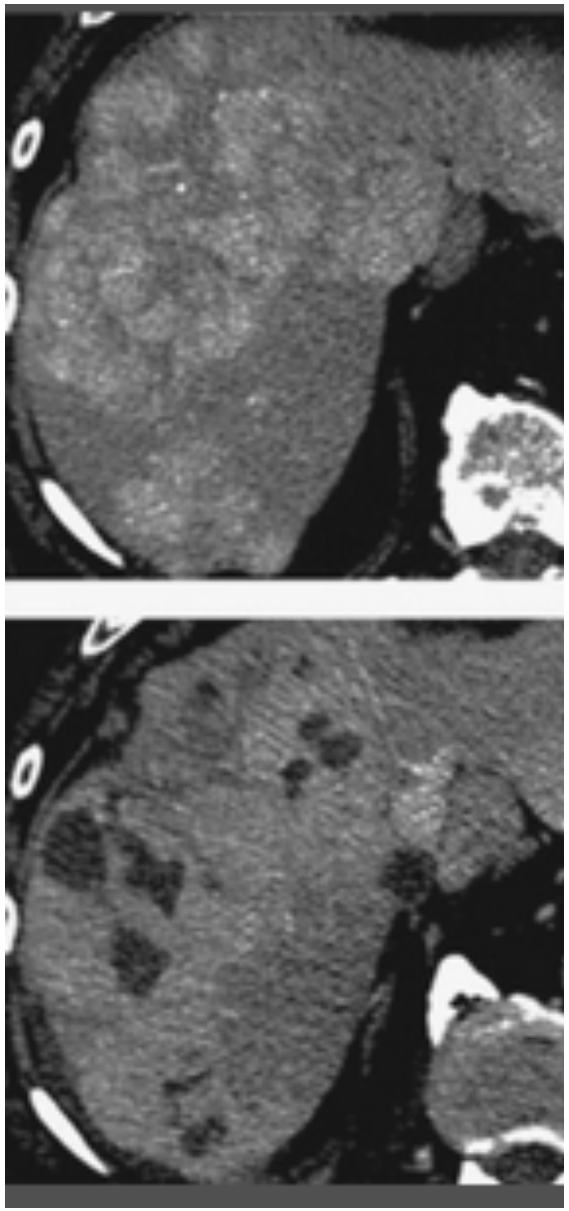
TABLE 127-3 Choi Response Criteria for Gastrointestinal Stromal Tumors

Complete response	Disappearance of lesions *and* No new lesions
Partial response	Decrease in size >10% (no new lesions) *or* Decrease in density >15% (no new lesions)
Progressive disease	New lesions *or* Increase in size by 10% (but no decrease in density by >15%) *or* New intratumoral nodules or increase in size of existing intratumoral nodules
Stable disease	None of the above

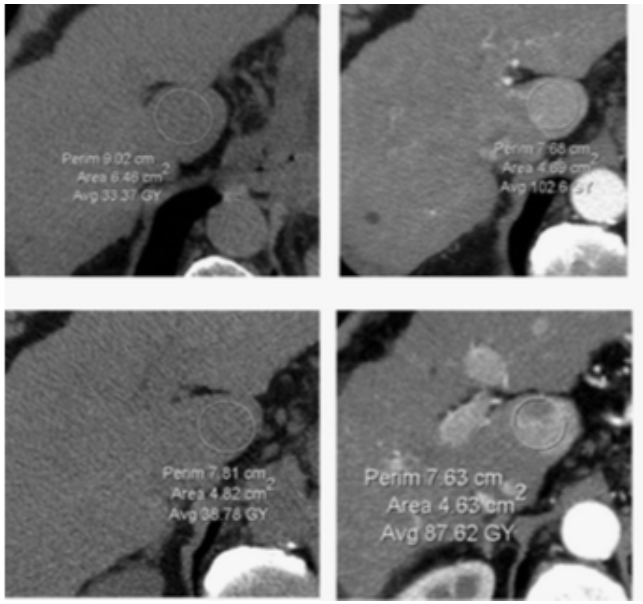
This study suggests that the **Choi criteria are most suitable for assessing the response of advanced-stage HCC to sorafenib.** Patients with disease progression at the first follow-up CT examination are never downstaged on subsequent examinations. Although sorafenib is an angiogenesis inhibitor, neither the occurrence of tumor necrosis nor a loss of tumor hypervascularization correlated with tumor response.

CONGRESSO PORTUGUÊS DE HEPATOLOGIA 2019
22ª REUNIÃO ANUAL DA APEF

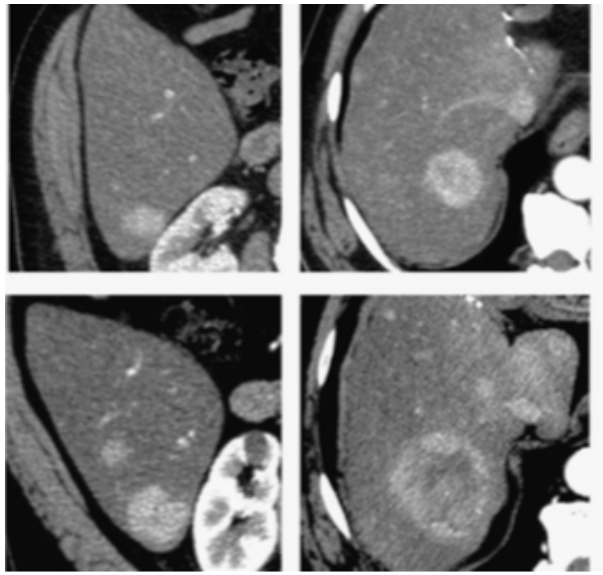
Resposta Completa



Resposta Parcial



Progressão



Terapêutica sistémica

57 anos, sexo masculino

Virus C . Tentativa de terapêutica sem sucesso. Alcool 100g /dia

ECO- dois nódulos

TC -Vários nódulos segmentos II, IV, VIII e V. Maior com 2,7 cm segmento IV.

CHC multicêntrico

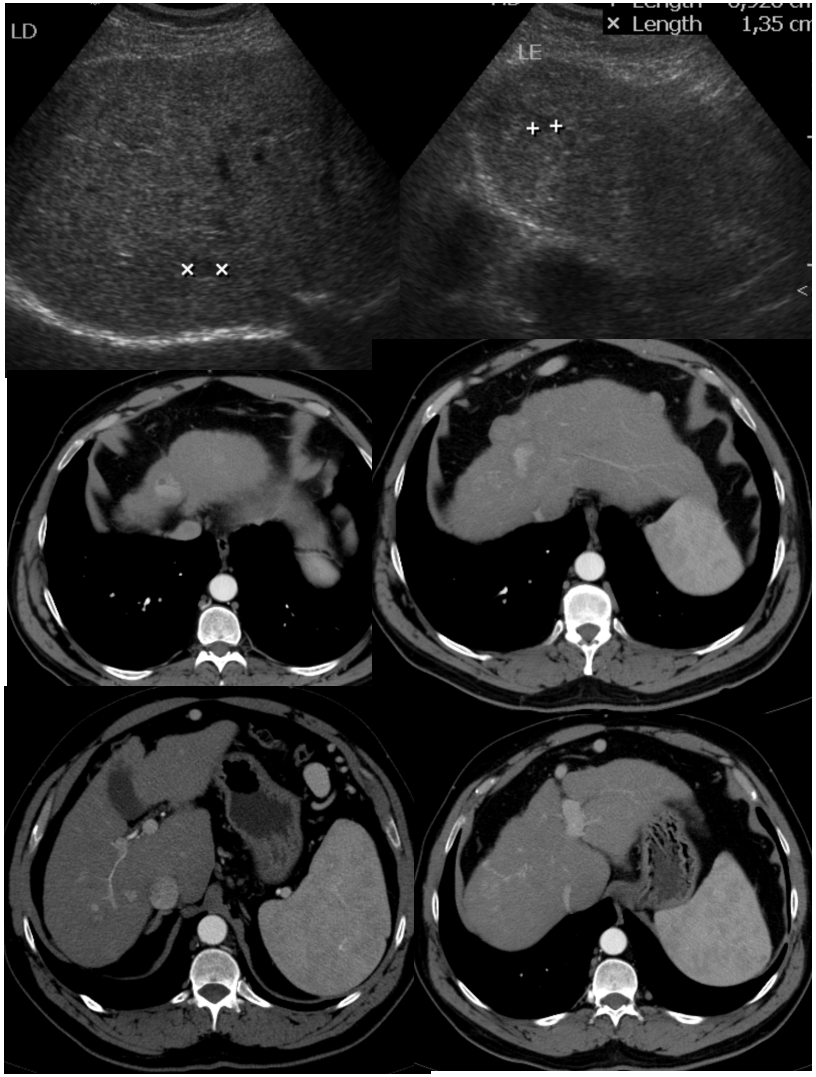
CHILD A ECOG0

Alfafetoproteína 2 ng/mL

REFERENCIADO AO CHBPT

RMD

SORAFENIB



R. COMPLETA
R. PARCIAL

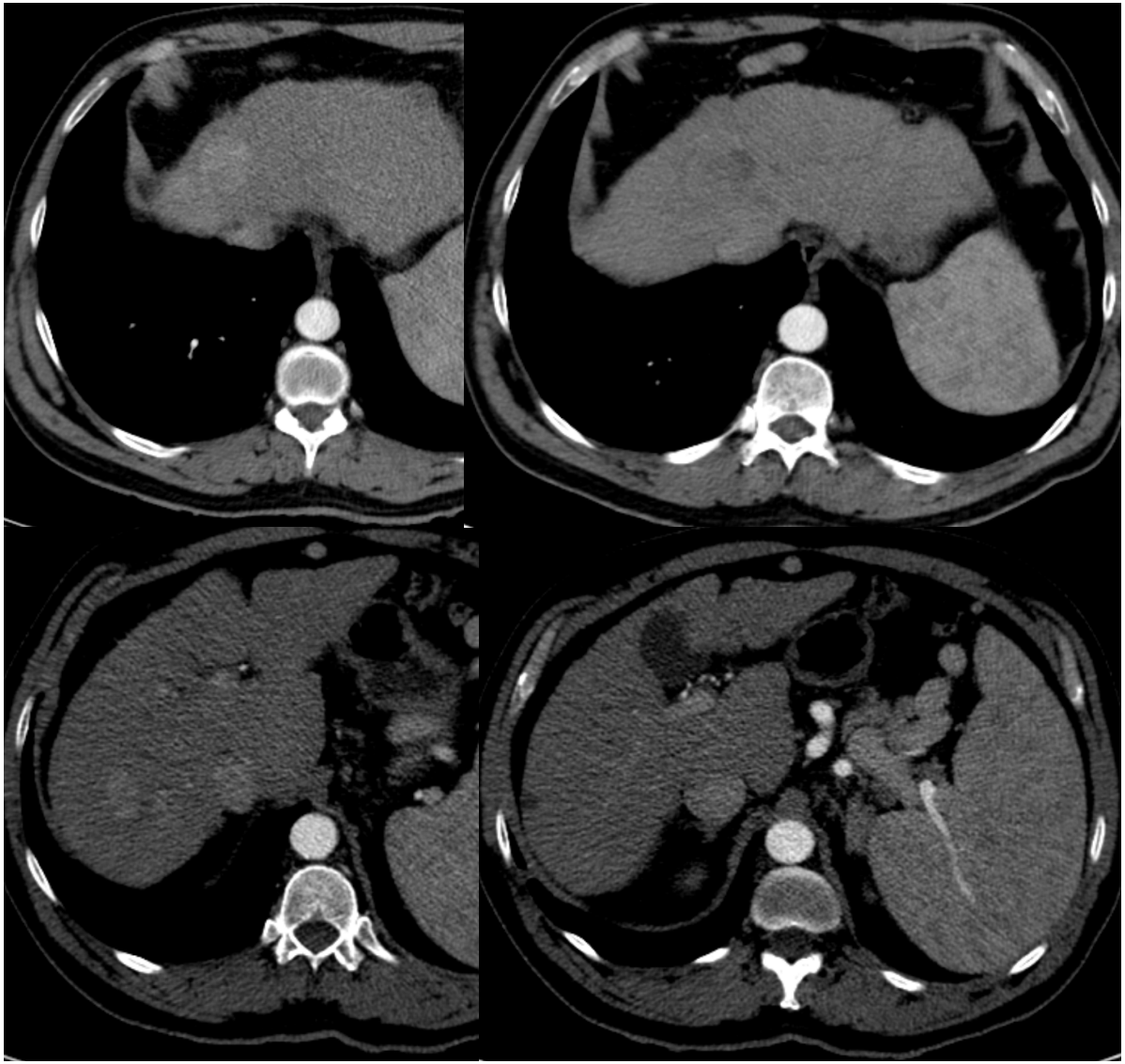
TC controlo

Resposta completa em alguns nódulos;

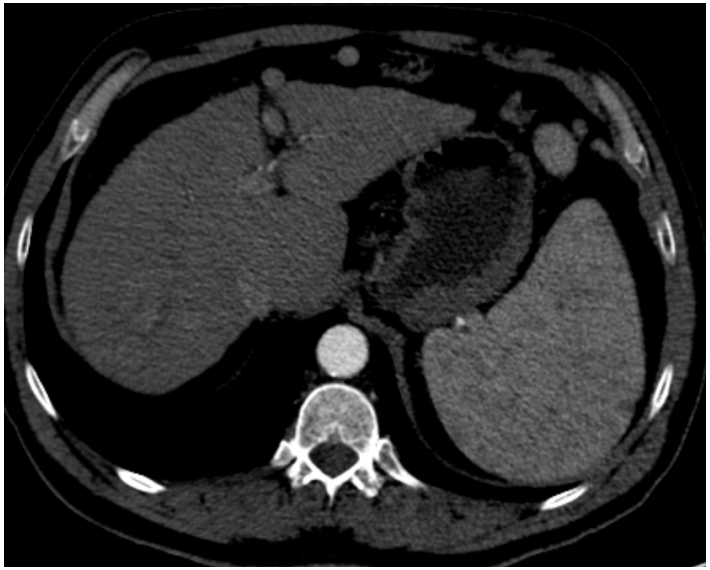
Resposta parcial noutros

DECISÃO

Continua SORAFENIB

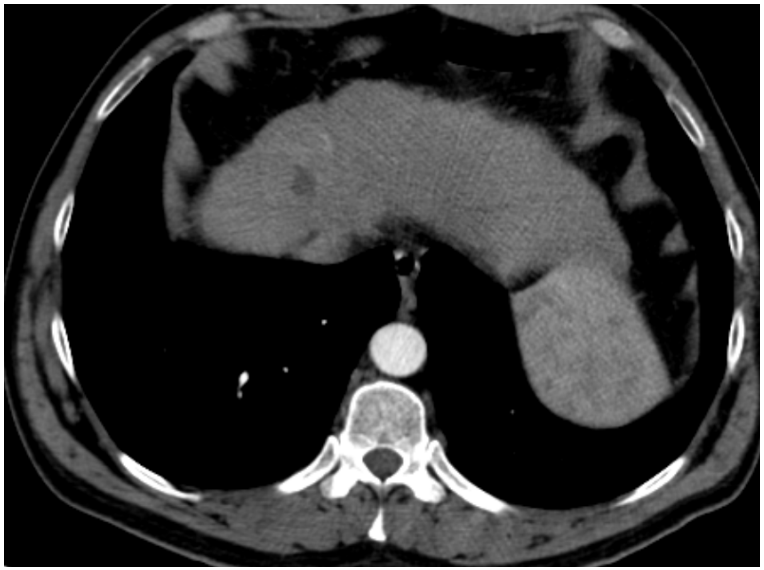


Boa tolerância ao Sorafenib



RMD

Mantém SORAFENIB



Progressão

70 anos, sexo masculino

História de: Virus C tratado

CHC com 10 cm no lobo direito.

Quimioembolização

MAIO 2017

(2 ampolas de DCbeads)

Passou mal depois da quimioembolização com importante sidrome pós quimioembolização e alopécia.

REFERENCIADO SET 2017

TC SET + Alfafetoproteina de 12631

Clild A ECOG0

RMD

Bland embolização

SET 2017

OUT 2017

Progressão

Alfafetoproteína

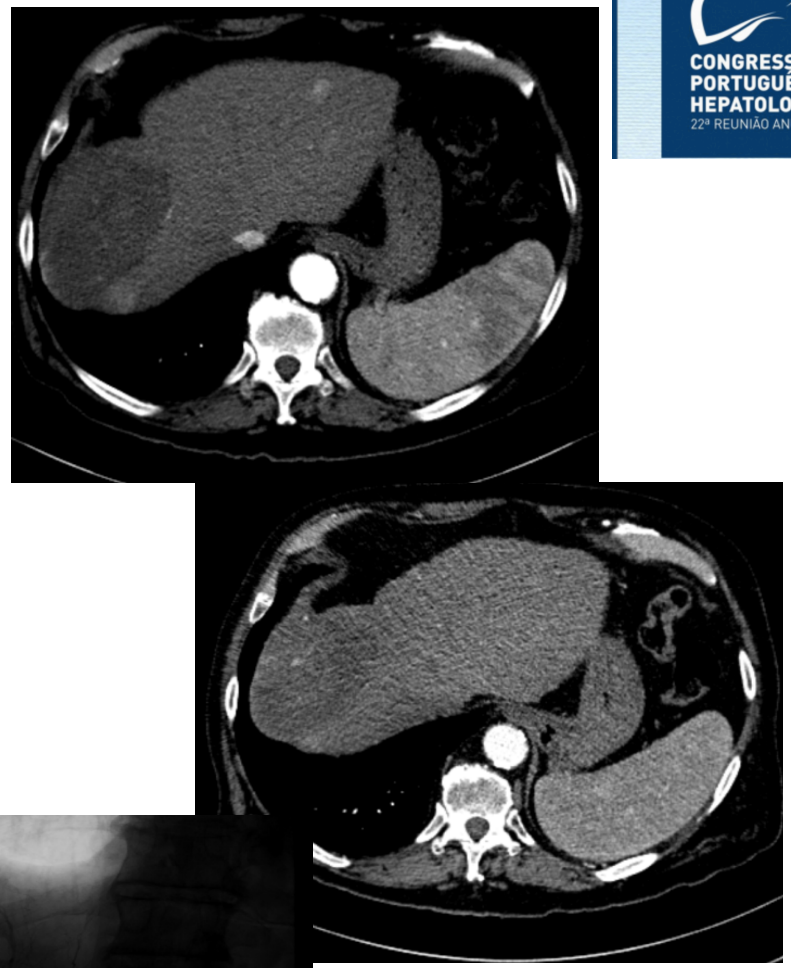
↓ 11530

TC mantém lesão satélite viável

RMD

repete Bland Embolização

Janeiro 2018



Progressão

MARÇO 2018

Alfafetoproteína

↑ 17099

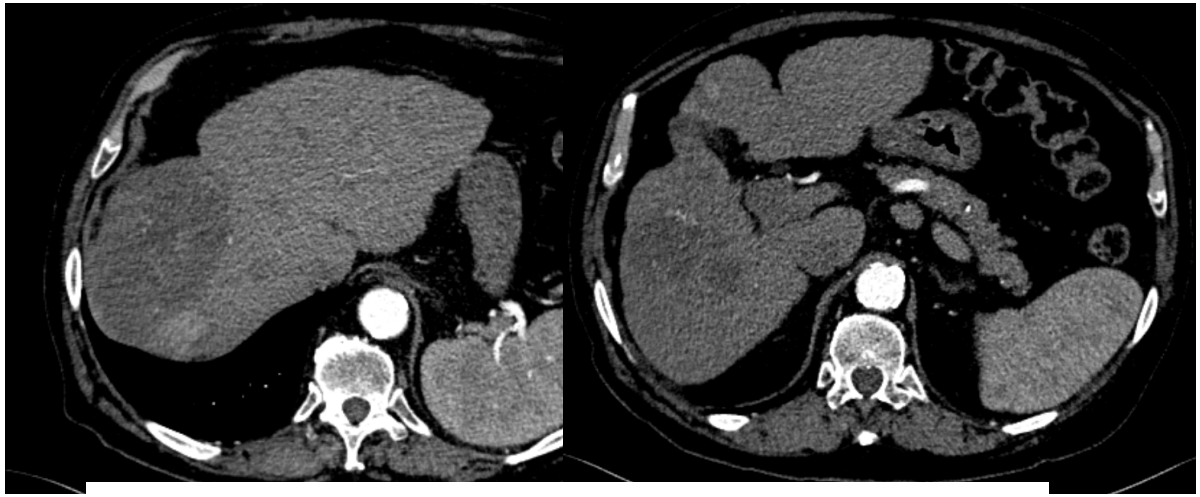
TC lesão satélite maior

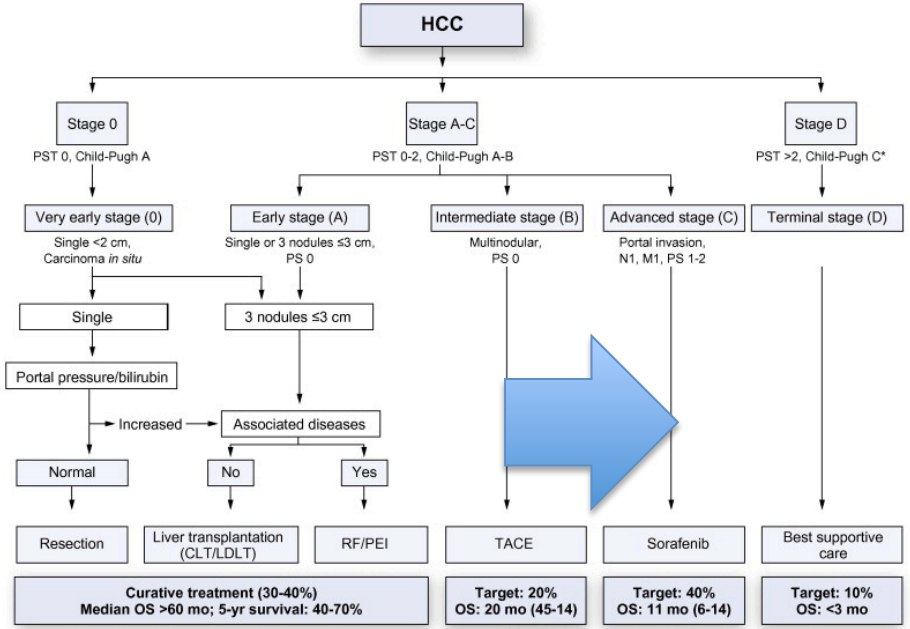
Novas lesões no IV e V

RMD

Terapêutica sistémica

Inicia Sorafenib





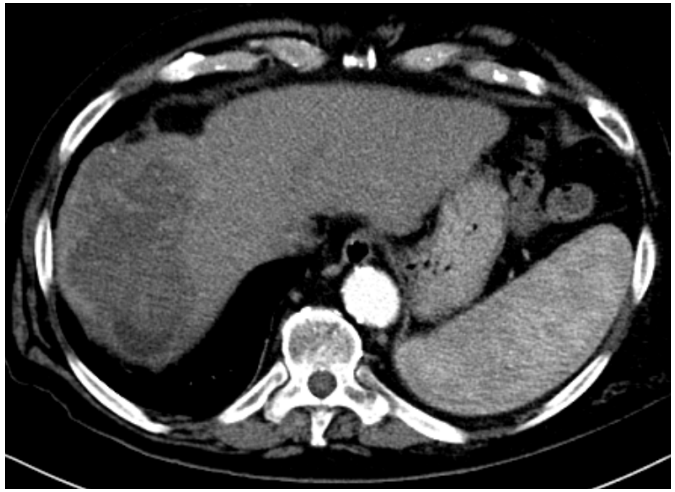
Progressão

JUNHO 2018

Alfafetoproteina

⬇ 11000

TC Estabilidade

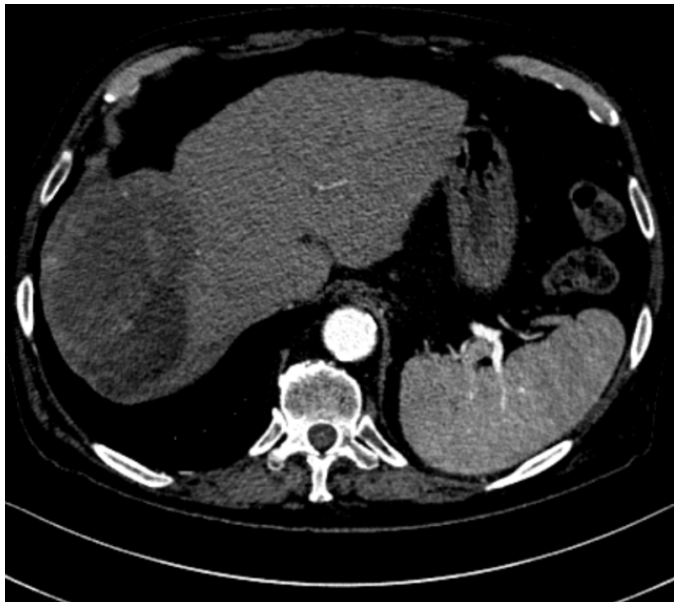


SET 2018

Alfafetoproteina

⬆ 11220

Novos nódulos / progressão



Mantém Sorafenib

Progressão

JANEIRO 2019

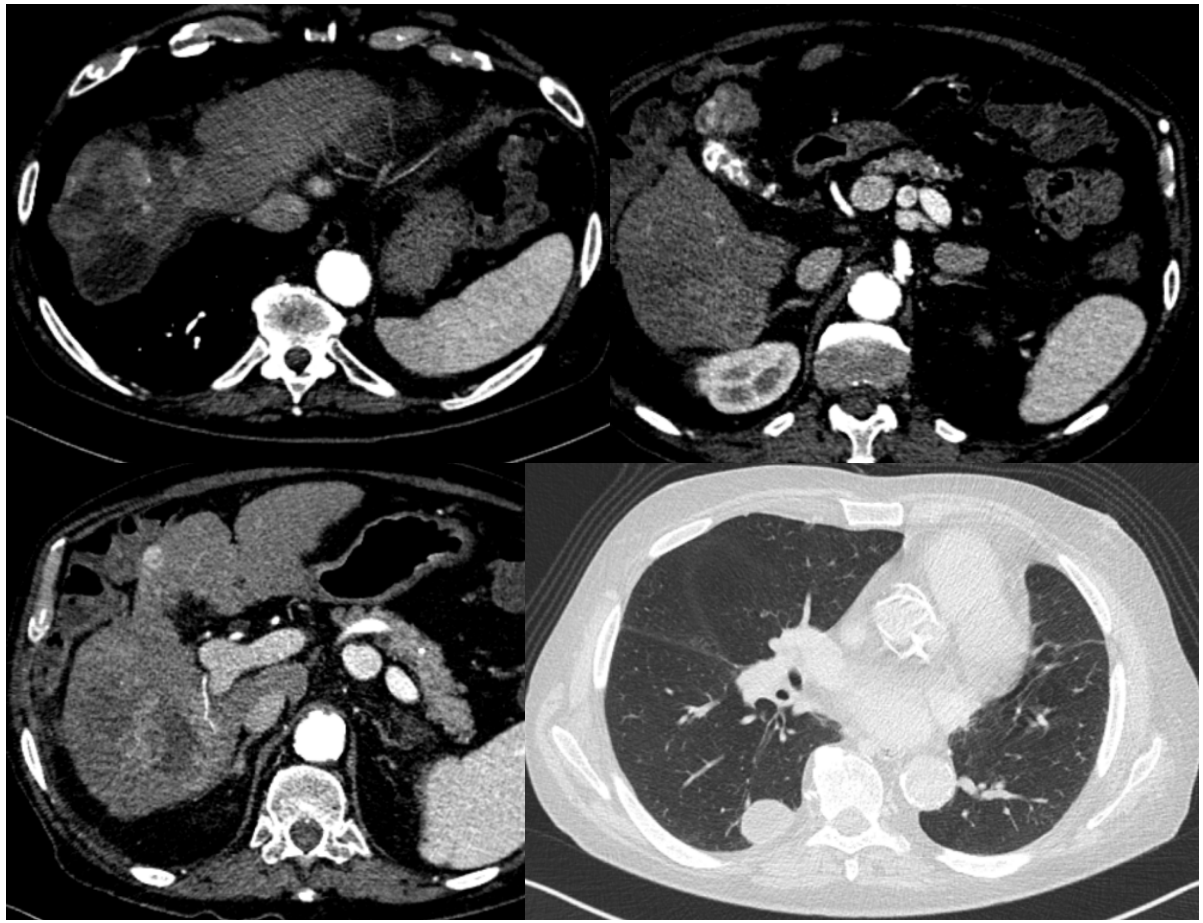
Alfafetoproteína

↑ 30000ng/mL

TC crescimento tumoral na lesão tratada;

novas lesões;

doença extra hepática



Inicia Regarofenib

Notas finais

- O controlo imagiológico no tratamento do CHC faz-se com TC trifásica ou RM dinâmica do fígado.
- O seguimento deve ser previamente determinado (trimestral) e qual a duração.
- Os critérios de avaliação mais usados são os da ESLD ou mRECIST mas outros critérios devem ser usados nas terapêuticas sistémicas (Choi?)
- A ausência de hipervascularidade não determina a OS
- BCLC - conceito de migração nas terapêuticas propostas
- Radiologista – deve ter em atenção o tipo de tratamento e conhecer os critérios de avaliação para follow up destes doentes

Muito Obrigada